

Remarks/Arguments:

Claims 1, 4, 6, 7-9, 11-28 are pending. No claim amendments are made with this Response.

I. The Office Action

The Office Action rejects claims 1, 9, 11, 21, 25 and 27 under 35 U.S.C. § 103(a) as being unpatentable over Murachi et al. (U.S. Patent No. 5,746,989) in view of Bogart et al. (U.S. Patent No. 4,923,487). The Office Action rejects claim 8 under 35 U.S.C. § 103(a) as being unpatentable over Murachi et al. (U.S. Patent No. 5,746,989) in view of Bogart et al. (U.S. Patent No. 4,923,487) as applied to claim 13 above, and further in view of Tanaka et al. (U.S. Patent No. 5,551,231). The Office Action also rejects claims 17, 18, 23, 24 under 35 U.S.C. § 103(a) as being unpatentable over Murachi et al. (U.S. Patent No. 5,746,989) in view of Bogart et al. (U.S. Patent No. 4,923,487) as applied to claims 1 and 21 above, and further in view of Buck (U.S. Patent 5,571,298).

II. Non-Obviousness

The applicants submit that the Office Action has failed to set forth a *prima facie* case for obviousness and the rejection under § 103(a) is improper. The Office Action acknowledges that Murachi et al. fails to disclose the limitations recited in claim 1, namely, a means for directing flow of gases to a central portion of the filter and an exhaust gas by-pass effective under all operating conditions and collecting 85wt% of engine-out particulates on the filter. The Office Action cites Bogart et al. as teaching these missing limitations. The Office Action states at page 2:

Bogart teaches that it would be conventional in the art, to direct the flow of gasses to a central portion of the filter, and use an exhaust gas-bypass effective under all operating conditions wherein a portion of the exhaust gases do not pass the trap. See the relative cross-sections in Figure 5, clearly the ration of cross-sections shown would collect up to 85 et. % of engine-out particulate matters.

A. Bogart fails to provide the missing limitations of Murachi et al.

The applicants respectfully disagree and request reconsideration. Upon review of Bogart et al., the applicants fail to see where Bogart et al. teaches a means for directing flow of gases to a central portion of the filter as recited in claim 1. The amended sheets of the application at page 4, lines 17-24 and Figure 4 set forth a variety of exemplary means, including baffle plates or cones, metal lips and the like to direct the flow of gases to the central portion of the trap.

The applicants have reviewed Bogart et al. and have found no such disclosure in that patent, and no citation to any text supporting such disclosure. Specifically, the applicants have found no support in Bogart et al. for the proposition that "teaches that it is conventional in the art, to direct flow of gases to a central portion of the filter." The only even remotely relevant description in Bogart et al. is at column 2, line 67 through column 3, line 9, which teaches that partitions are disposed in the inlet plenum for directing gas flow to selected canister inlet openings. The plenums contain diverter valves which are selectively closed to isolate individual passageways leading to discrete portions of the canister. Closing a selected passageway while maintaining other passageways open allows discrete portions of the canister to be regenerated while other discrete portions of the canister in continuous use. This teaching in Bogart et al., of passing gases through selective passageways defined by partitioned plenums leading to discrete portions of a canister, does not constitute directing gases to the central portion of a filter as recited in claim 1 of the present invention.

In fact, from the above-quoted stated in the Office Action, the applicants are uncertain as to the basis for satisfying the claim limitation of directing the flow of gases to a central portion of the filter. In particular, the Office Action states that Bogart et al. teaches that it is conventional in the art to direct flow of gases to a central portion of the filter. As mentioned above, the applicants have found no reference in Bogart et al. to satisfy this limitation. If, on the other hand, the basis is that it is merely "conventional in the art" without regard to the disclosure of Bogart et al., the applicants respectfully request some reference or other grounds for supporting this assertion. See M.P.E.P. § 2144.03 which states that it is never appropriate to rely solely on "common knowledge" in the art without evidentiary support in the record, as the principle evidence upon which the rejection is made. *In re Zurko*, 258 F.3d 1379, 1385 (Fed. Cir. 2001).

B. Bogart et al. teaches away from directing gas to a central portion of the filter

Moreover, the applicants submit that Bogart et al., in fact teaches away from directing gases into the central portion of the filter. Bogart et al. teaches partitioned plenums for directing gas to selected canister inlet openings so that the discrete portions of the canister can be regenerated while the other discrete portions of the canister are still in use. In contrast, the present invention employs a "means for directing flow of gases to a central portion of the filter." When the filter becomes saturated, the gas passes around the filter through a gas by-pass. Therefore, Bogart et al. teaches away from directing the gas to a central portion of the filter, which eventually may become saturated, by teaching the use of partitioned plenums that direct gas to discrete portions of the canister which then can be regenerated without having the gas by-pass the canister altogether.

C. The Office Action draws an unsupported and improper inference

The applicants also fail to see where Bogart et al. teaches collecting 85 wt. % of engine-out particulate matter on the trap as recited in claim 1 of the present invention. The Office Action makes an assertion, "clearly the ratio of cross-sections shown would collect up to 85 et. % of engine-out particulate matters," by referencing Figure 5 and the cross-sections contained therein. Under M.P.E.P. § 2125, drawings may be used to form a rejection. However, the drawings must show all the claimed features. The applicants fail to see how Figure 5 shows collection of 85wt% of engine-out particulates as recited in claim 1. The Office Action is relying on an inference from the drawings and has not cited any facts in support of this inference. The applicants respectfully disagree with this position. In fact, the applicants not only fail to see how the drawings teach this limitation, but after reading and understanding the specification of Bogart et al., the applicants also fail to find any teaching in Bogart et al. that contemplates the canister collecting any weight percentage of particulates, let alone the specific 85wt% of engine-out particulates as recited in claim 1 of the present invention.

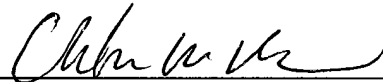
III. Conclusion

The Bogart et al. references fails to fill the void of the Murachi et al. reference. The combination of Murachi et al. and Bogart et al. therefore fails to teach or suggest all the claimed limitations of claims 1, 4, 5, 7-9 and 11-28. More specifically, the applicants respectfully

submit that the pending claims are nonobvious in view of the cited references because 1) Bogart et al. fails to teach the limitations also not taught by Murachi et al., 2) Bogart et al. in fact teaches away from the presently claimed invention, and 3) in forming the rejection, the Office Action made an improper and unsupported inference from the disclosure of Bogart et al. Reconsideration in view of the above arguments is earnestly requested.

In view of the prosecution history for this application, the applicants respectfully request a telephonic interview with the Examiner, if necessary. In this regard, the applicants' representatives will contact the Examiner in approximately one month from the mailing date of this Response to schedule a telephonic interview. If the Examiner has any question or concern or would like to contact the applicants representative upon receipt of this Response, the applicants' representatives can be reached at 610-407-0700, M-F, 8:00-5:00 E.S.T.

Respectfully submitted,



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Dated: March 5, 2004

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